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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,586	12/18/2001	Shannon M. Short	BS01-404	6161

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EXAMINER

HAROLD, JEFFEREY F

ART UNIT	PAPER NUMBER
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2646

DATE MAILED: 09/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/017,586	Applicant(s) SHORT ET AL.	
	Examiner Jefferey F. Harold	Art Unit 2646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-15 and 18-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-15 and 18-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. **Claims 26, 27 and 1-8** are rejected under 35 U.S.C. 102(e) as being anticipated by Alperovich et al. (6,298,247), hereinafter referenced as Alperovich.

Regarding **claim 26**, Alperovich discloses a method and apparatus for automatic volume control. In addition, Alperovich discloses a method of controlling a speaker volume of a communications device, comprising: providing to a user of the communications device with two options (manual control and VC1/VC2) for controlling the speaker volume based on ambient noise; implementing a volume control action that is based on the ambient noise and that corresponds to the option selected by the user thereby control the speaker volume based on ambient noise, as disclosed at column 3, line 1 through column 4, line 9.

Regarding **claim 27**, Alperovich discloses everything claimed as applied above (see claim 26), in addition Alperovich discloses wherein the at least two different options comprises use of a one time ambient noise sample to automatically adjust the speaker volume one time for a call, as disclosed at column 3, lines 38-46; and use of a repetitive

ambient noise sample to repetitively adjust the speaker volume for a call, as disclosed at column 3, line 66 through column 4, line 4.

Regarding **claim 1**, Alperovich discloses everything claimed as applied above (see claim 26), in addition Alperovich discloses (a) sampling the ambient noise level in the vicinity of the communications device to detect a first sample noise level; (b) determining whether the first sample noise level is greater than a threshold level; (c) automatically adjusting the volume of the speaker to a first volume level sufficient to overcome the first sample noise level and maintaining the volume of the speaker at the first volume level; (d) resampling the ambient noise level in the vicinity of the communications device to detect a second sample noise level; (e) determining whether the second sample ambient noise level is greater than the threshold level; and (f) automatically readjusting the volume of the speaker to a second volume level sufficient to overcome the second sample noise level and maintaining the volume of the speaker at the second volume level, as disclosed at column 3, lines 6-20 and exhibited in figure 3.

Regarding **claim 2**, Alperovich discloses everything claimed as applied above (see claim 26), in addition, Alperovich discloses wherein the communications device comprises a mobile telephone, as disclosed at column 2, lines 30-37 and exhibited in figure 1.

Regarding **claim 3**, Alperovich discloses everything claimed as applied above (see claim 1) Alperovich further comprising selecting an initial speaker volume level, as disclosed at column 3, lines 38-45.

Regarding **claim 4**, Alperovich discloses everything claimed as applied above (see claim 1), in addition Alperovich further comprising enabling steps (a)-(f) via a button associated with the communications device as disclosed at column 3, lines 38-45.

Regarding **claim 5**, Alperovich discloses everything claimed as applied above (see claim 1), in addition Alperovich discloses repeating steps (d)- (f), as disclosed at column 3, lines 6-20 and exhibited in figure 3.

Regarding **claim 6**, Alperovich discloses everything claimed as applied above (see claim 5), in addition Alperovich discloses an inherent delay as evidenced by the fact that one of ordinary skill in the art would have recognized that the delay would have been provided for the purpose of processing time to determine/compare detected volume to prior to changing the.

Regarding **claim 7**, Alperovich discloses everything claimed as applied above (see claim 1), in addition Alperovich discloses wherein step (f) comprises one of increasing and decreasing speaker volume, as disclosed at column 3, lines 6-20 and exhibited in figure 3.

Regarding **claim 8**, Alperovich discloses everything claimed as applied above (see claim 1), in addition, Alperovich discloses wherein ambient noise sampling is accomplished via a microphone, as disclosed at column 3, lines 58-65.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich in view of Higuchi (United States Patent 6,363,644).

Regarding **claim 9**, Alperovich discloses everything claimed as applied above (see claim 8), however, Alperovich fails to disclose ambient noise sampling is accomplished via a microphone. However the examiner maintains that it was well known in the art to ambient noise sampling is accomplished via a microphone and resetting speaker volume to an initial setting, as taught by Higuchi.

In a similar field of endeavor Higuchi discloses a speech communication apparatus and method for transmitting speech at a constant level with reduced noise. In addition, Higuchi discloses a noise microphone (40) for converting near end side ambient noise, which reads on claimed "ambient noise sampling is accomplished via a microphone", as disclosed at column 5, lines 63-66 and exhibited in figure 3.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alperovich by specifically providing wherein ambient noise sampling is accomplished via a microphone, for the purpose of obtaining a substantially noise only signal.

3. **Claims 10, 11, and 13-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich in view of Clancy et al. (United States Patent 5,802,164), hereinafter referenced as Clancy.

Regarding **claim 10**, Alperovich discloses everything claimed as applied above (see claim 1), however, the Alperovich fails to disclose resetting speaker volume to an initial setting. However the examiner maintains that it was well known in the art to reset speaker volume to an initial setting, as taught by Clancy.

In a similar field of endeavor Clancy discloses systems and methods for controlling telephone sound enhancement on a per call basis. In addition, Clancy discloses monitoring the telephony signal to ascertain call boundary data, such as the beginning or end of the call. This data is used to determine when the end of call is reached. Once it is reached a signal is sent to the signal enhancement circuitry to reset the average volume control, as disclosed at column 11, line 42 through column 12, line 41 and exhibited in figure 5.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Alperovich by specifically providing resetting speaker volume, for the purpose nullifying the undesired skewing.

Regarding **claim 11**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claims 1, 3 and 10.

Regarding **claim 13**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claim 2.

Regarding **claim 14**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claim 2.

Regarding **claim 15**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claim 5.

4. **Claims 18-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Alperovich in view of well known prior art, The Duplan Coporation v. Deering Milliken, Inc, et al. (197 USPQ 342), hereinafter referenced as Duplan v. Deering.

Regarding **claim 18**, Alperovich discloses a mobile station (100), as disclosed at column 2, lines 31-37 and exhibited in figure 1, which reads on claimed "mobile communications device"; comprising: an inherent display screen, a speaker (112), a mouthpiece housed in MS (100), as disclosed at column 2, lines 40-44 and exhibited in figure 1, wherein a display screen is inherent as evidenced by the fact that one of ordinary skill in the art would have recognized that a display screen would have been provided for the purpose of viewing the menu for controlling the functions of the mobile station; mouthpiece reads on "microphone", and mobile station reads on "body";

volume control apparatus (120) and ENMD (102) for adjusting a volume level of the speaker (112) in response to external noise data; which reads on claimed "means for adjusting a volume level of the speaker in response to ambient noise", as disclosed at column 3, lines 10-20 and exhibited in figure 3; wherein volume control apparatus and ENMD read on "means for adjusting volume" and external noise data reads on "ambient noise";

wherein the volume control apparatus (120) and ENMD are operable to sample the external noise data, determine the relationship between the sampled external noise data and a subscriber desired volume control data, and automatically cause the volume of the speaker (112) to increase or decrease to a level sufficient to overcome the sampled ambient noise, which reads on claimed "wherein the means for adjusting is operable to sample the ambient noise, and the volume control apparatus sends a control signal to automatically cause the volume of the speaker to increase to a level sufficient to overcome the sampled ambient noise" as disclosed at column 3, lines 7-20 and exhibited in figure 3; wherein the volume control apparatus and the ENMD reads on "means for adjusting", subscriber desired volume control data reads on "threshold" and external noise data reads on "ambient noise" however, Alperovich fails to disclose determining greater than a threshold and provide means for receiving user input to activate and deactivate the means for adjusting independently of powering on and off the mobile communications device. However, the examiner maintains that it was well known in the art for determining greater than a threshold and provide means for receiving user input to activate and deactivate the means for adjusting independently of powering on and off the mobile communications device, as taught by Duplane v. Deering

Duplane v. Deering discloses that there can be no invention in merely providing means to selectively alternate between one unpatentable configuration of elements and another configuration of old elements, where there is no new or different function. Hence as disclosed above Alperovich discloses means for automatically adjusting

volume and it is well known to not have automatic volume control. Thus providing a means to activate/deactivate (i.e. switching between two unpatentable configurations) is unpatentable because no new or different function is disclosed.

Regarding **claim 19**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claim 9.

Regarding **claim 20**, Alperovich and Duplane v. Deering disclose everything claimed as applied above (see claim 18), in addition a cellular telephone inherently comprises a display screen with option to select functions. Further the combination discloses the means for receiving user input to activate and deactivate the means for adjusting independently of powering on and off the mobile communications device thus the interface to control the function is included in the display.

Regarding **claim 21**, Alperovich and Duplane v. Deering disclose everything claimed as applied above (see claim 18), in addition Alperovich discloses manual adjustments via the user which reads on claimed "button operable to enable means for adjusting", as disclosed at column 3, lines 38-45

Regarding **claim 22**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claim 7.

Regarding **claim 23**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claim 5.

Regarding **claim 24**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claim 3.

Regarding **claim 25**, it is interpreted and thus rejected for the reasons set forth above in the rejection of claim 10.

Response to Arguments

5. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jefferey F. Harold whose telephone number is 571-272-7519. The examiner can normally be reached on Monday - Friday 9 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh H. Tran can be reached on 571-272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JFH
September 22, 2005



Jefferey F Harold
Primary Examiner
Art Unit 2646